K1532

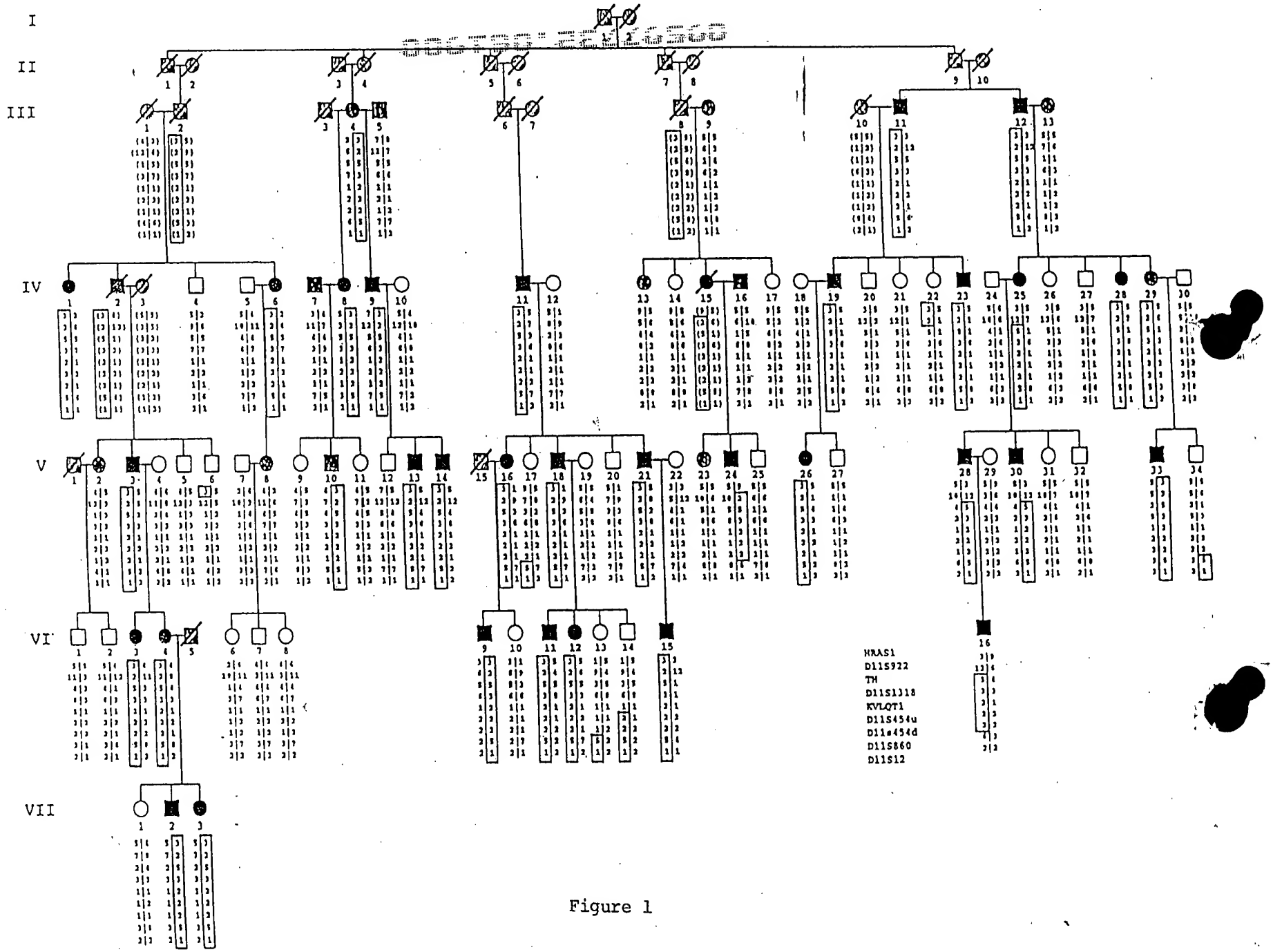


Figure 1

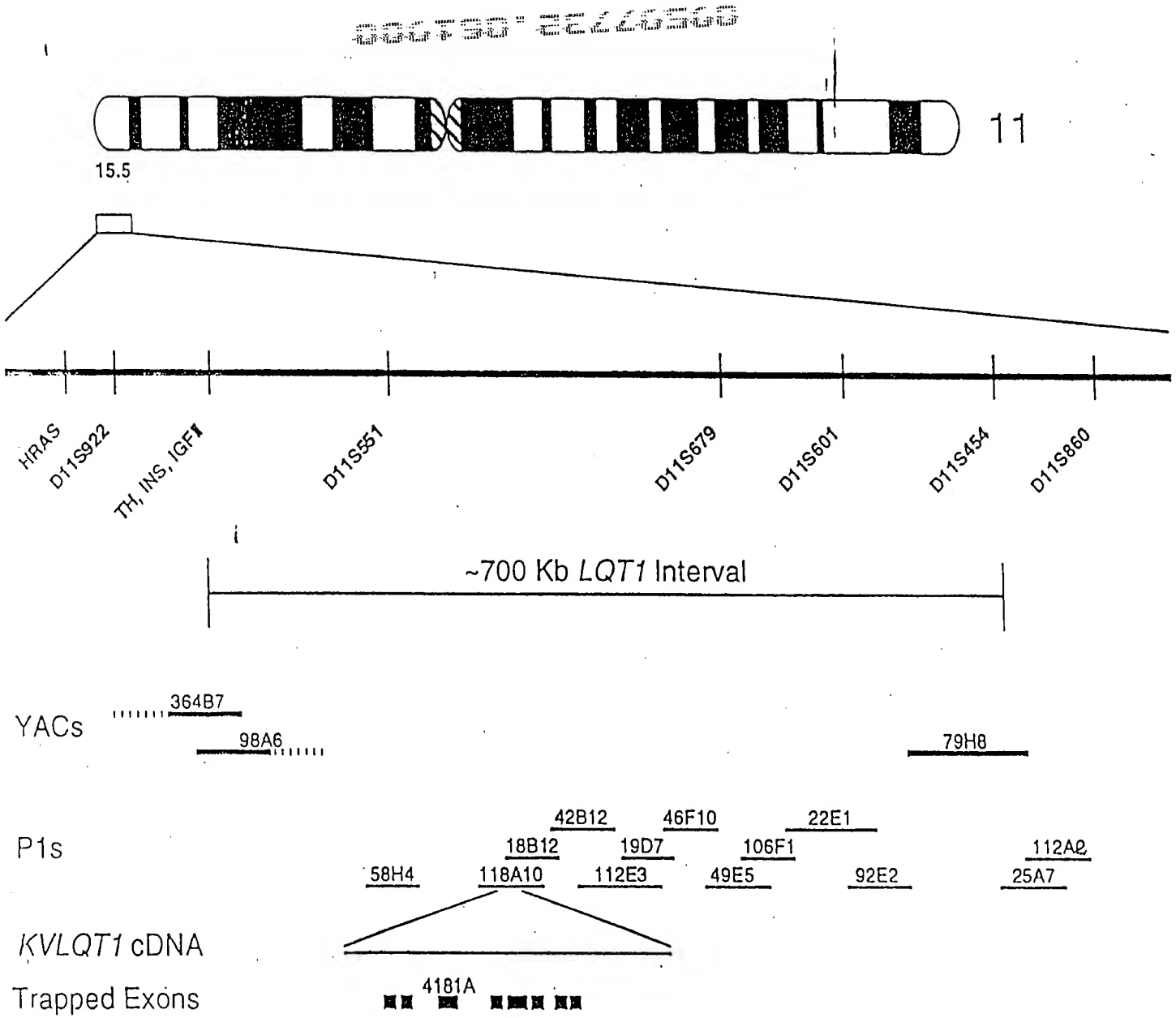

11
15.5
HRAS
D11S922
TH, INS, IGF
D11S551
D11S679
D11S601
D11S454
D11S860
~700 Kb LQT1 Interval
YACs
364B7
98A6
79H8
P1s
42B12
46F10
22E1
18B12
19D7
106F1
112A2
58H4
118A10
112E3
49E5
92E2
25A7
KVLQT1 cDNA
Trapped Exons
4181A

Figure 2

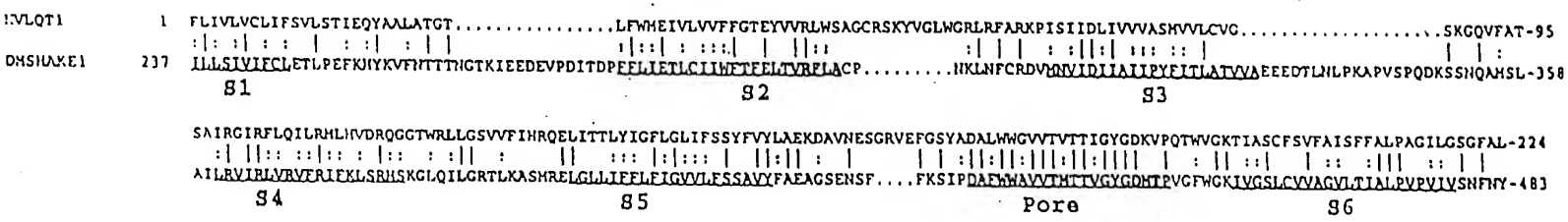


Figure 3

Heart
Brain
Placenta
Lung
Liver
Skeletal muscle
Kidney
Pancreas
3.2 kb

Figure 4

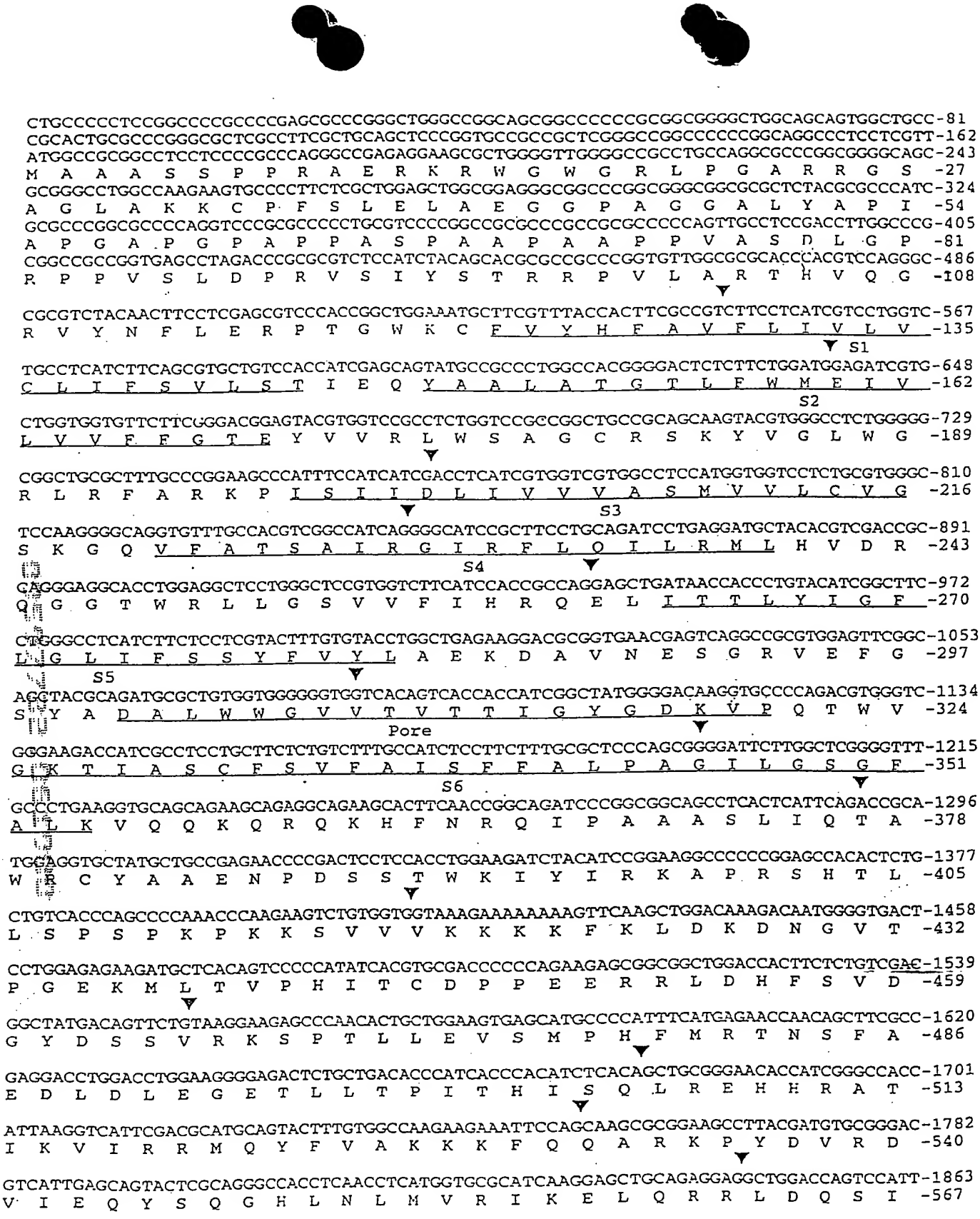
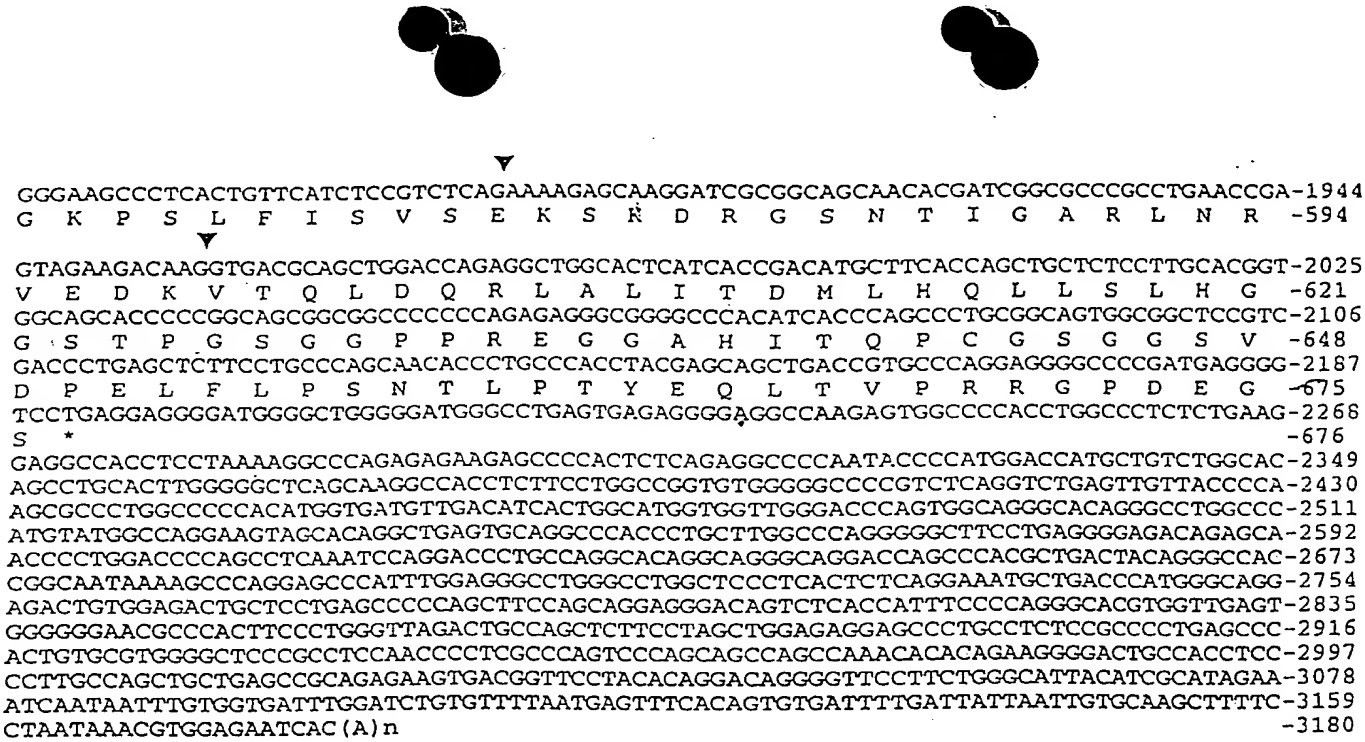


Figure 5A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V E D K V T Q L D Q R L A L I T D M L H Q L L S L H G -621
GGCAGCACCCCCGGCAGCGGCGGCCCCCCCAGAGAGGGCGGGGCCCACATCACCCAGCCCTGCGGCAGTGGCGGCTCCGTC-2106
G S T P G S G G P P R E G G A H I T Q P C G S G G S V -648
GACCCTGAGCTCTTCCTGCCCAGCAACACCCTGCCCACCTACGAGCAGCTGACCGTGCCCAGGAGGGGCCCCGATGAGGGG-2187
D P E L F L P S N T L P T Y E Q L T V P R R G P D E G -675
TCCTGAGGAGGGGATGGGGCTGGGGGATGGGCCTGAGTGAGAGGGGAGGCCAAGAGTGGCCCCACCTGGCCCTCTCTGAAG-2268
S * -676
GAGGCCACCTCCTAAAAGGCCCAGAGAGAAGAGCCCCACTCTCAGAGGCCCCAATACCCCATGGACCATGCTGTCTGGCAC-2349
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ACTGTGCGTGGGGCTCCCGCCTCCAACCCCTCGCCCAGTCCCAGCAGCCAGCCAAACACACAGAAGGGGACTGCCACCTCC-2997
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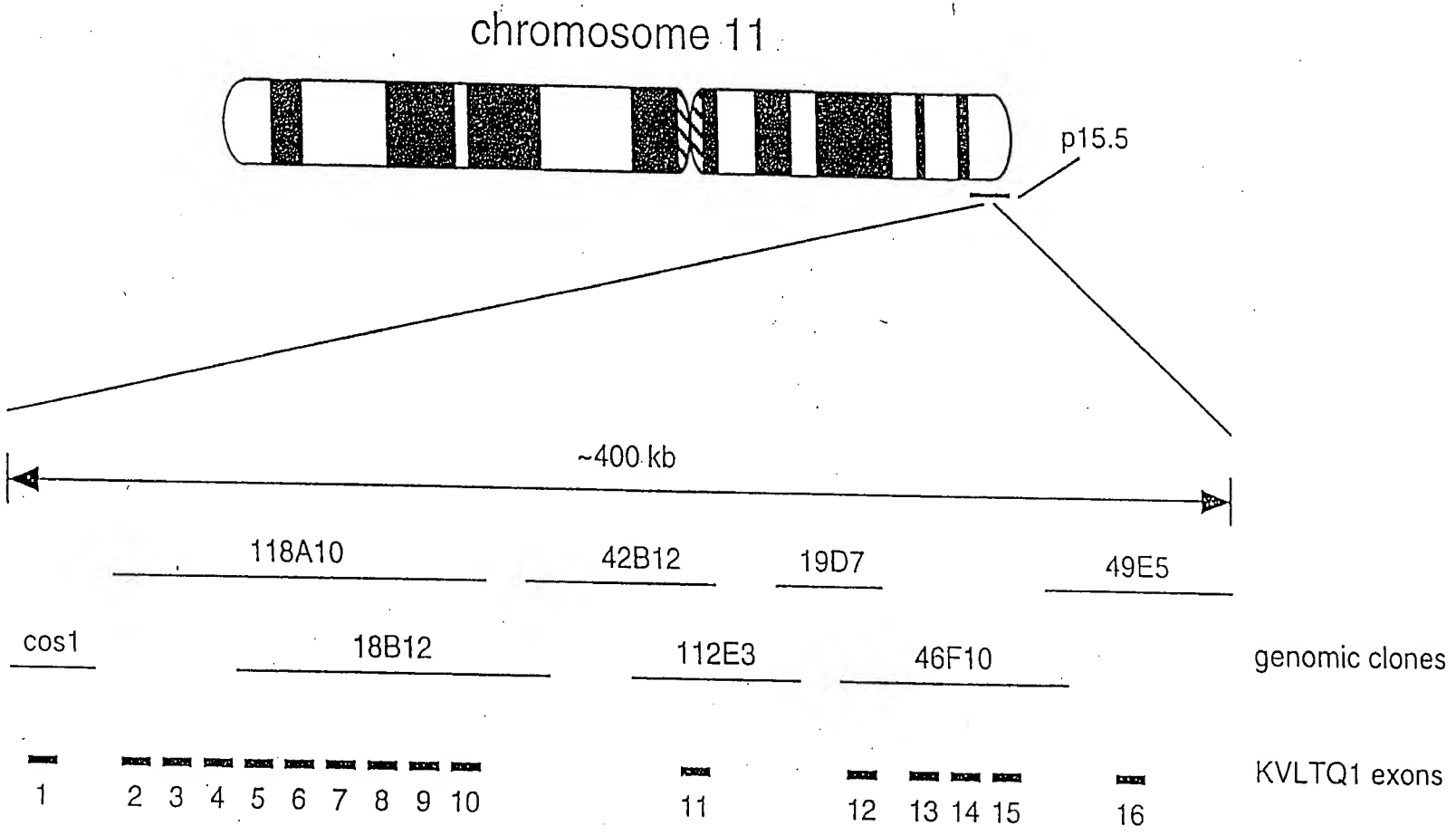
CTAATAAACGTGGAGAATCAC(A)n -3180

Figure 5B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p15.5
~400 kb
118A10
42B12
19D7
49E5
cos1
18B12
112E3
46F10
genomic clones
1
2 3 4 5 6 7 8 9 10
11
12 13 14 15
16
KVLTQ1 exons

Figure 6

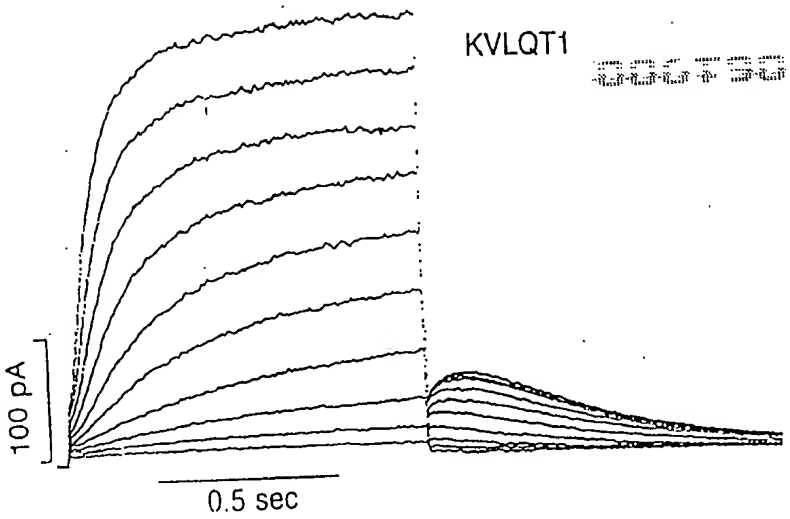


Figure 7A

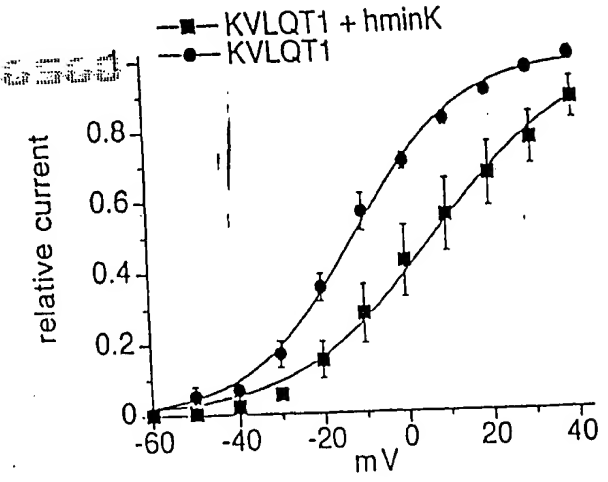


Figure 7B

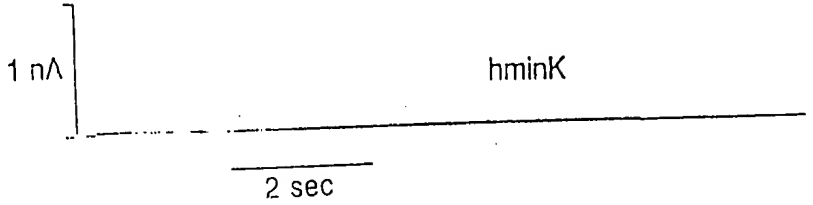


Figure 7C

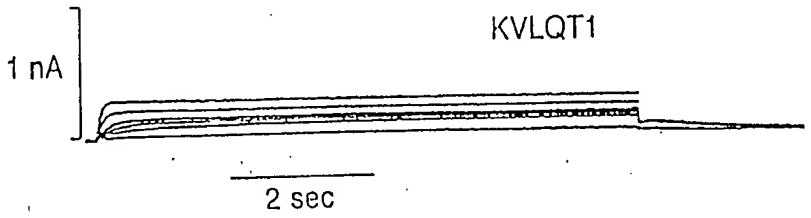


Figure 7D

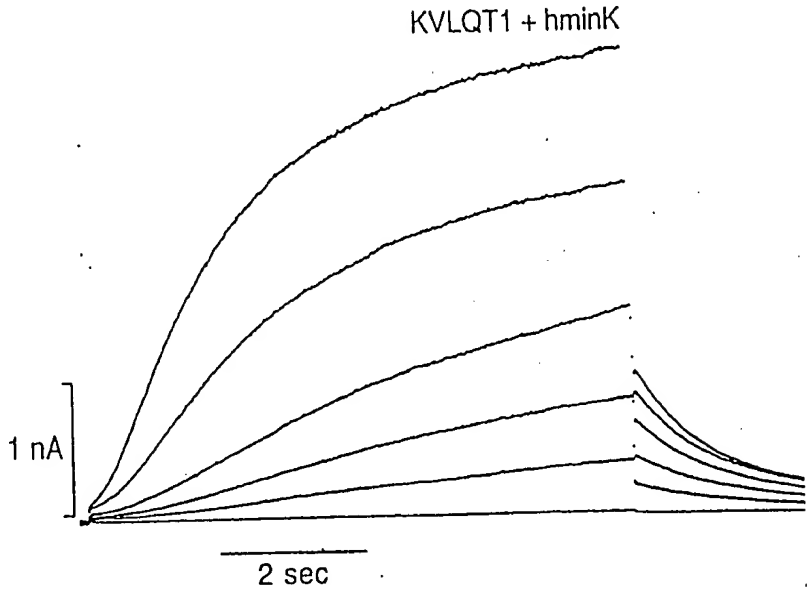


Figure 7E

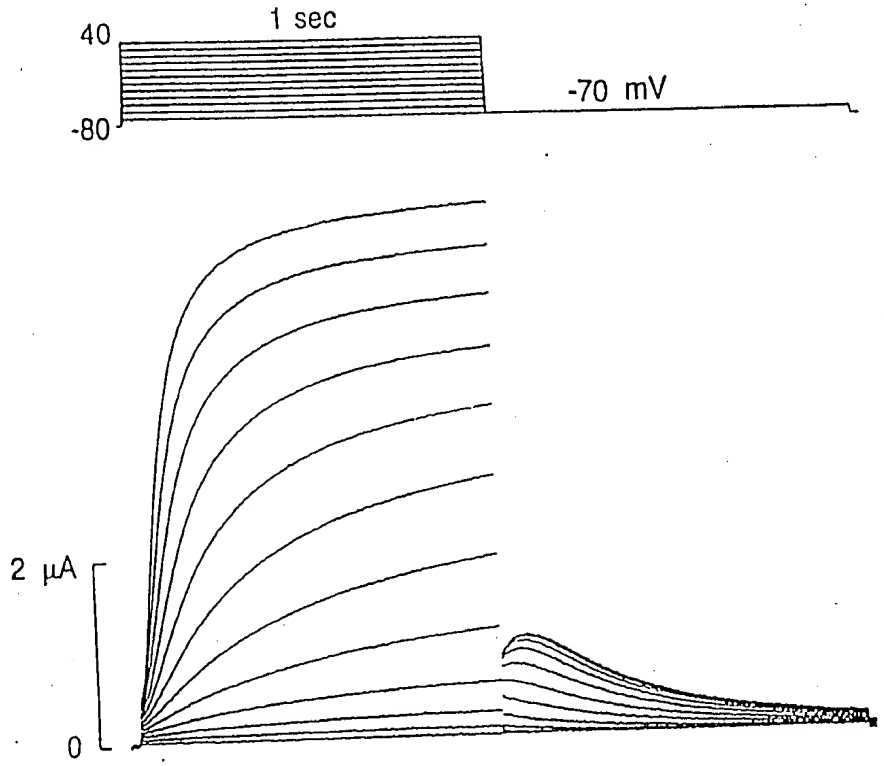


Figure 8A

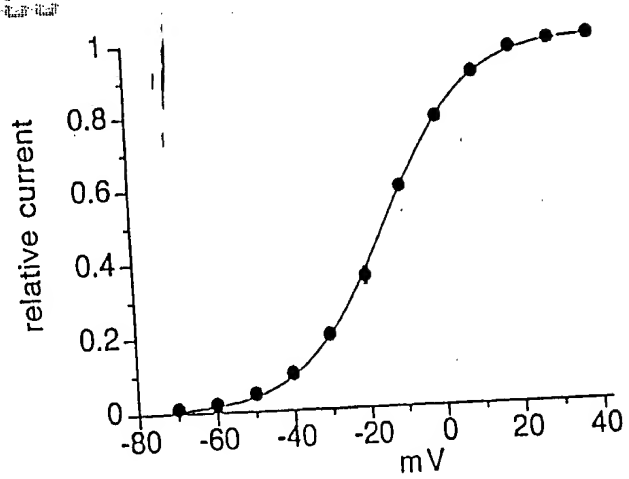


Figure 8B

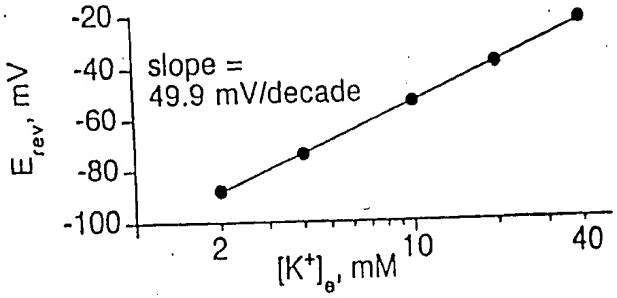


Figure 8C

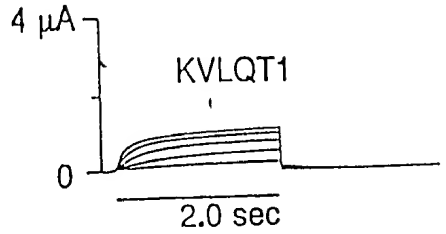


Figure 9A

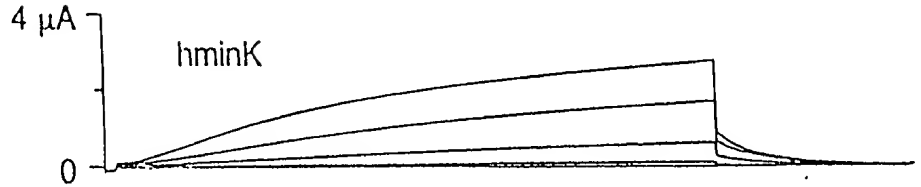


Figure 9B

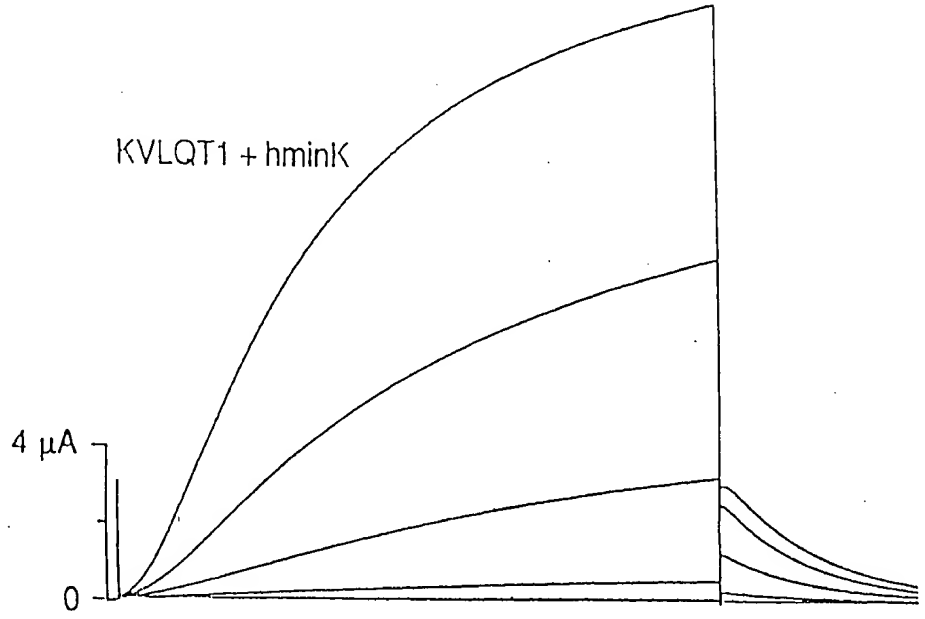


Figure 9C

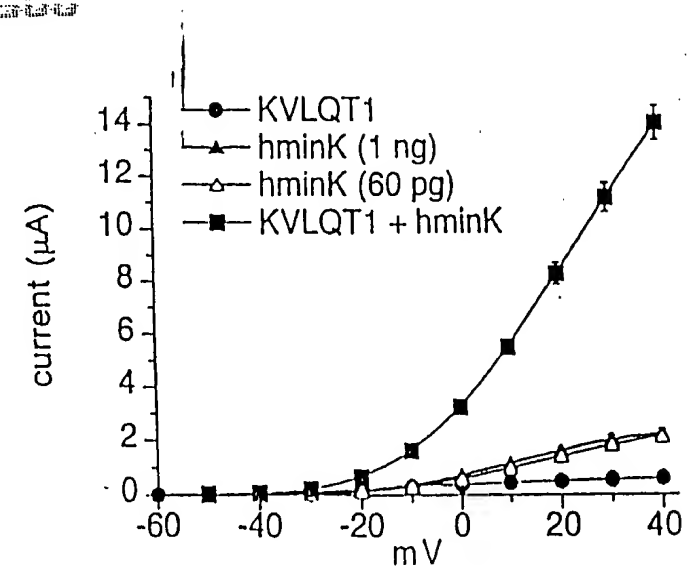


Figure 9D

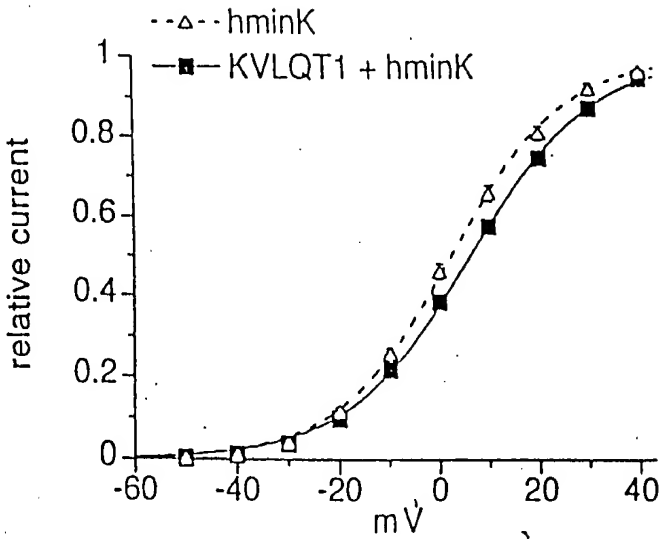
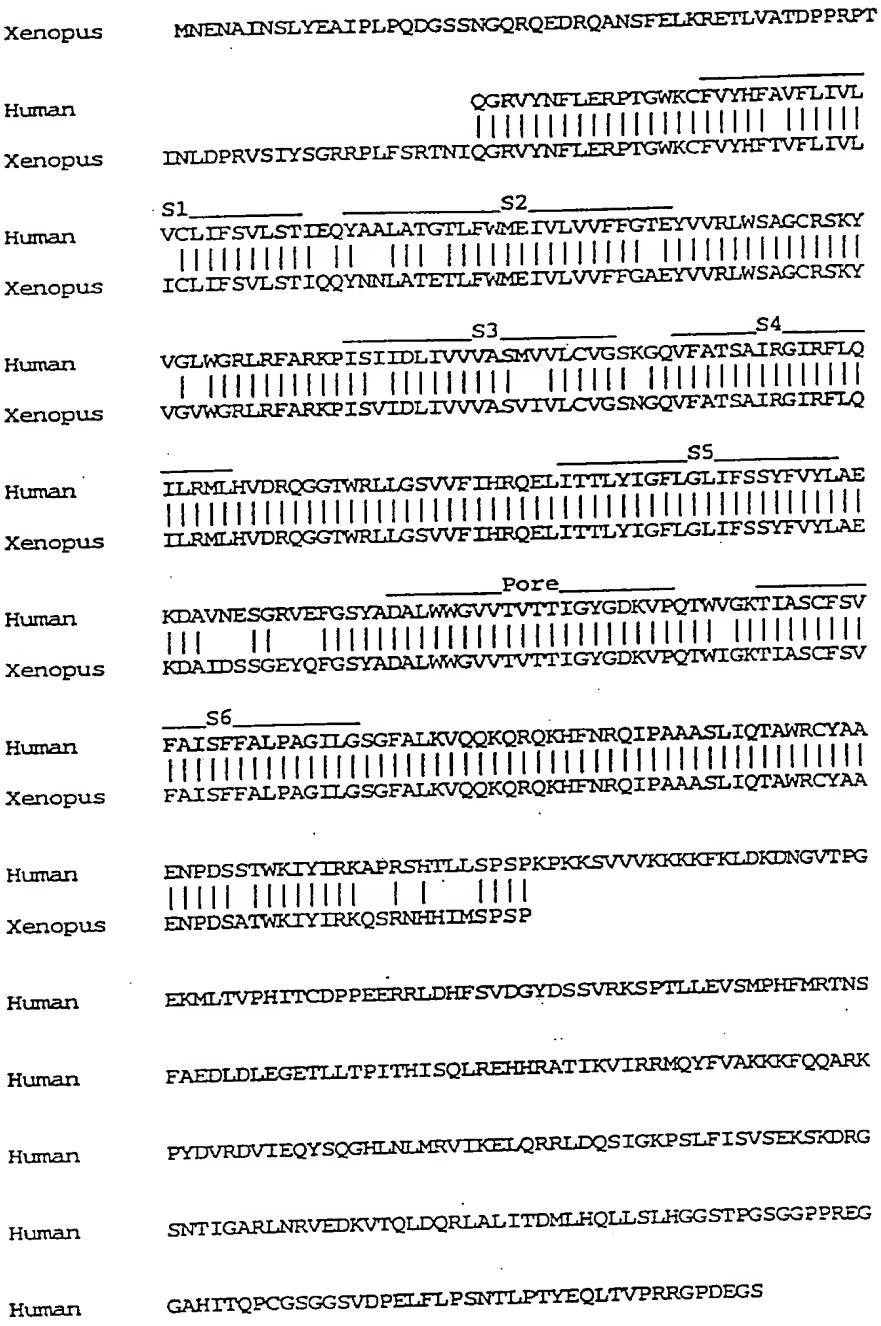


Figure 9E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Human QGRVYNFLERPTGWKCFVYHFAVFLIVL
Xenopus INLDPRVSIYSGRRPLFSRTNIQGRVYNFLERPTGWKCFVYHFTVFLIVL
S1 S2
Human VCLIFSVLSTIEQYAALATGTLFWMEIVLVVFFGTEYVVRLWSAGCRSKY
Xenopus ICLIFSVLSTIQQYNNLATETLFWMEIVLVVFFGAEYVVRLWSAGCRSKY
S3 S4
Human VGLWGRLRFARKPISIIDLIVVVASMVVLCVGSKGQVFATSAIRGIRFLQ
Xenopus VGVWGRLRFARKPISVIDLIVVVASVIVLCVGSNGQVFATSAIRGIRFLQ
S5
Human ILRMLHVDRQGGTWRLLGSVVFIHRQELITTLYIGFLGLIFSSYFVYLAE
Xenopus ILRMLHVDRQGGTWRLLGSVVFIHRQELITTLYIGFLGLIFSSYFVYLAE
Pore
Human KDAVNESGRVEFGSYADALWWGVVTVTTIGYGDKVPQTWVGKTIASCFSV
Xenopus KDAIDSSGEYQFGSYADALWWGVVTVTTIGYGDKVPQTWIGKTIASCFSV
S6
Human FAISFFALPAGILGSGFALKVQQKQRQKHFNRQIPAAASLIQTAWRCYAA
Xenopus FAISFFALPAGILGSGFALKVQQKQRQKHFNRQIPAAASLIQTAWRCYAA
Human ENPDSSTWKIYIRKAPRSHTLLSPSPKPKKSVVVKKKKFKLDKDNGVTPG
Xenopus ENPDSATWKIYIRKQSRNHHIMSPSP
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Human FAEDLDLEGETLLTPITHISQLREHHRATIKVIRRMQYFVAKKKFQQARK
Human PYDVRDVIEQYSQGHLNLMRVIKELQRRLDQSIGKPSLFISVSEKSKDRG
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Human GAHTTQPCGSGGSVDPELFLPSNTLPTYEQLTVPRRGPDEGS

Figure 10

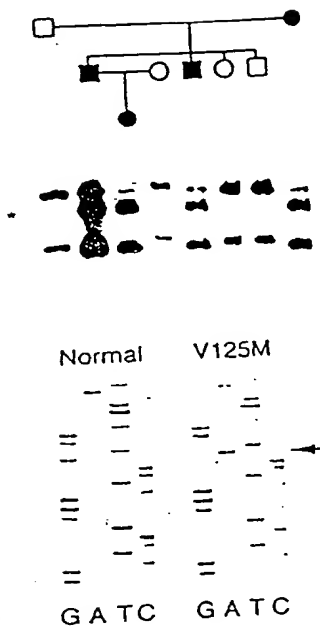


Figure 11A

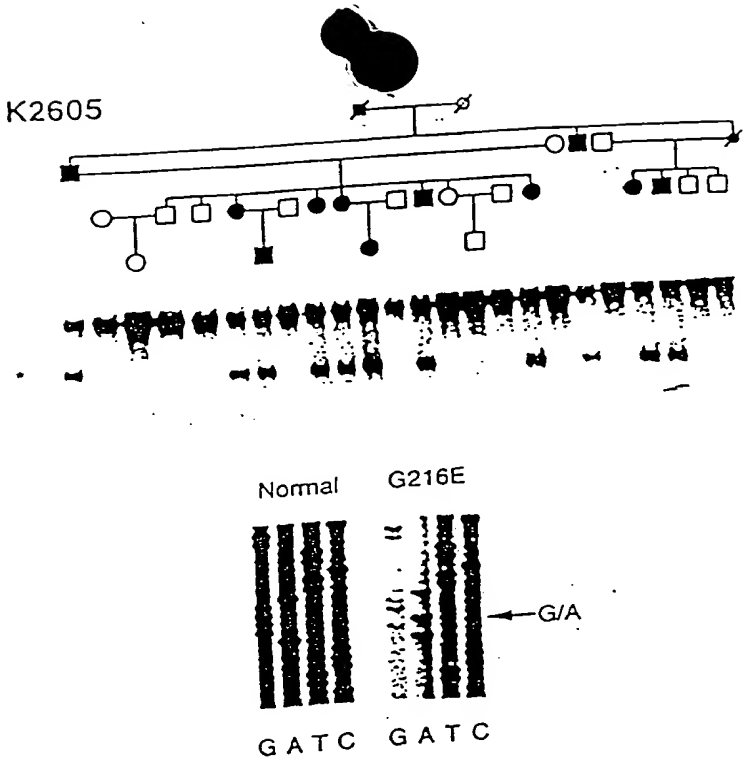


Figure 11B

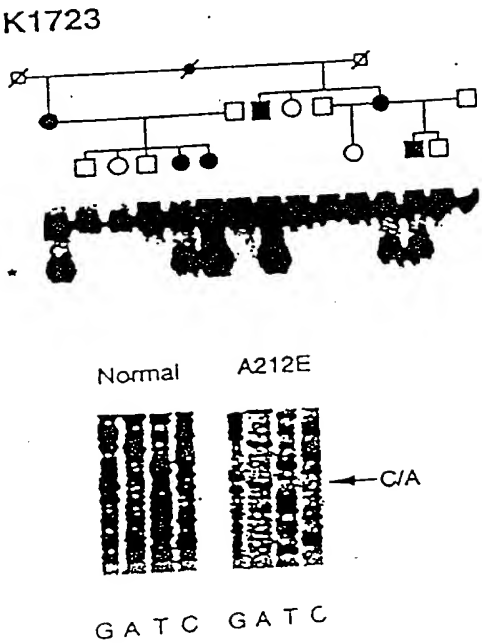


Figure 11C

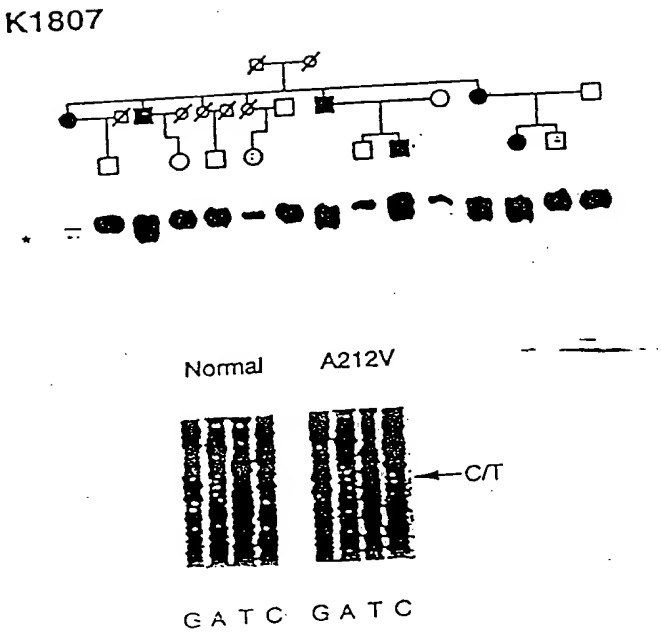


Figure 11D

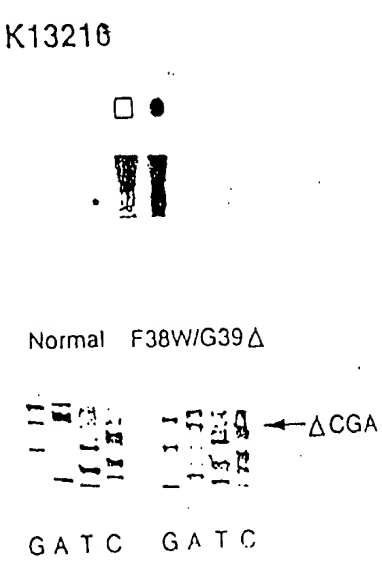


Figure 12A

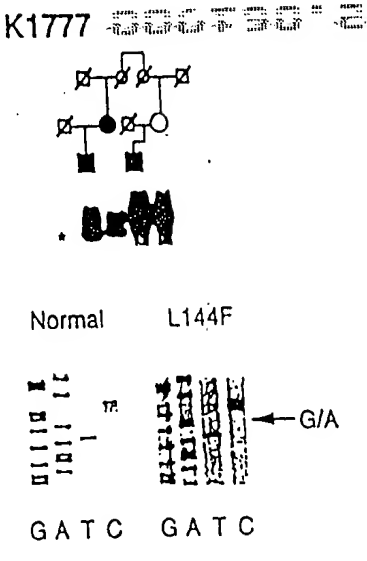


Figure 12B

Figure 12C

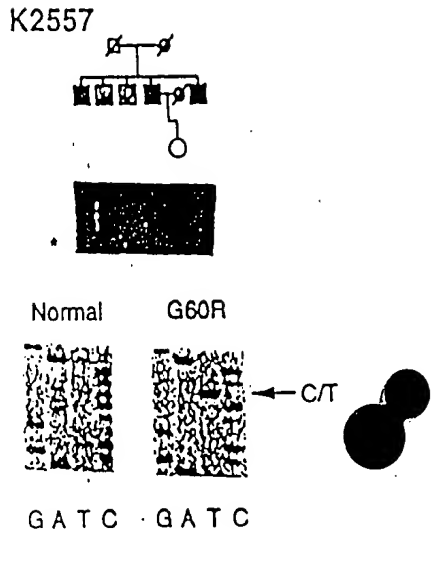


Figure 12D

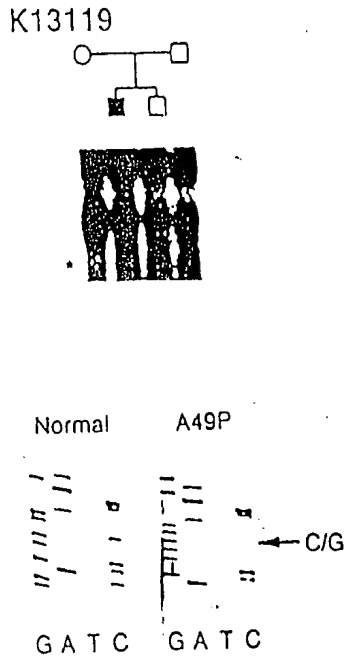


Figure 12E

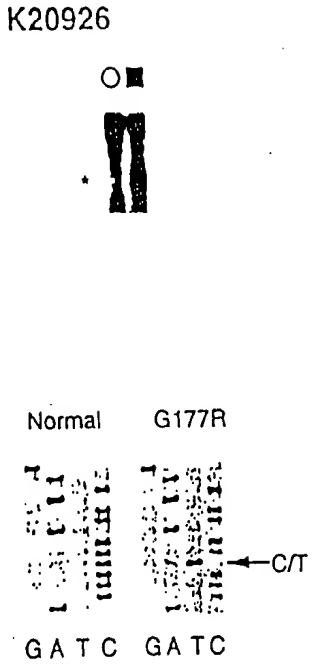


Figure 12F

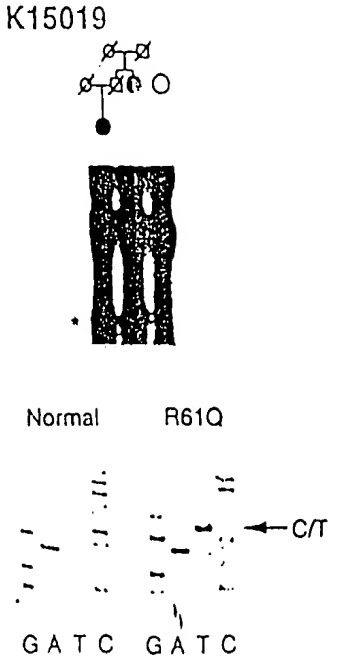
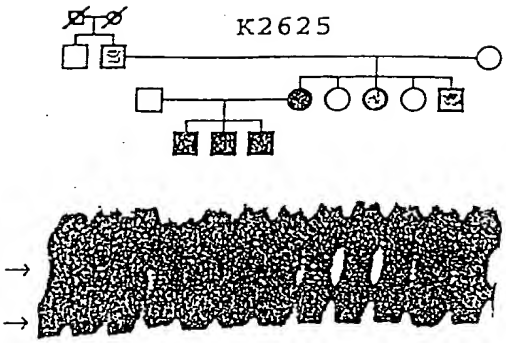
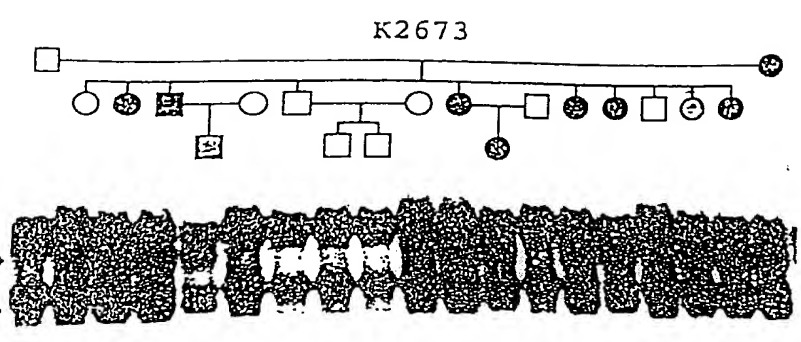


Figure 12G



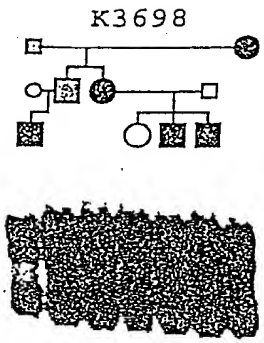
Gly168Arg

Figure 12H



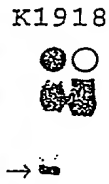
Gly168Arg

Figure 12I



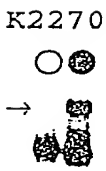
Gly168Arg

Figure 12J



Gly314Ser

Figure 12K

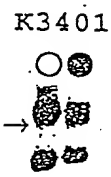


Tyr315Cys

Figure 12L

Lys318Asn

Figure 12M



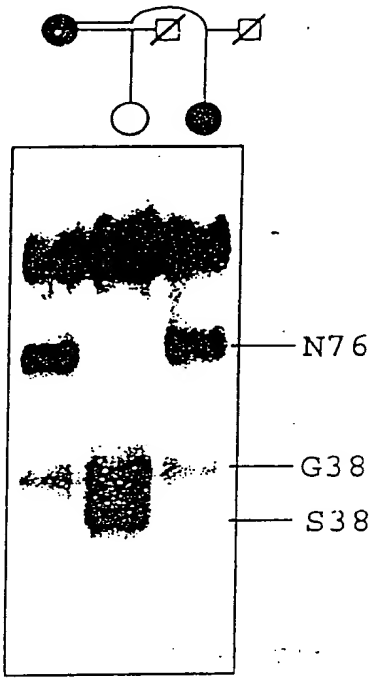
Leu353Pro

Figure 12N

Arg366Trp

Figure 12O

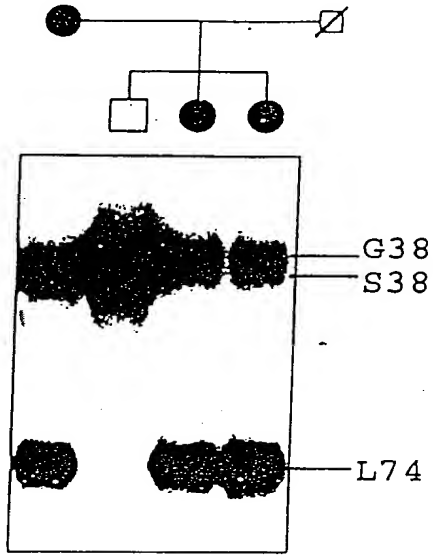
K1789



Normal	CAC	TCG	AAC	GAC	CCA	TTC	AAC
	H	S	N	D	P	F	N
Mutant	CAC	TCG	AAC	AAC	CCA	TTC	AAC
	H	S	N	N	P	F	N

Figure 13A

K1754



Normal	CTG	GAG	CAC	TCG	AAC	GAC	CCA
	L	E	H	S	N	D	P
Mutant	CTG	GAG	CAC	TTG	AAC	GAC	CCA
	L	E	H	L	N	D	P

Figure 13B

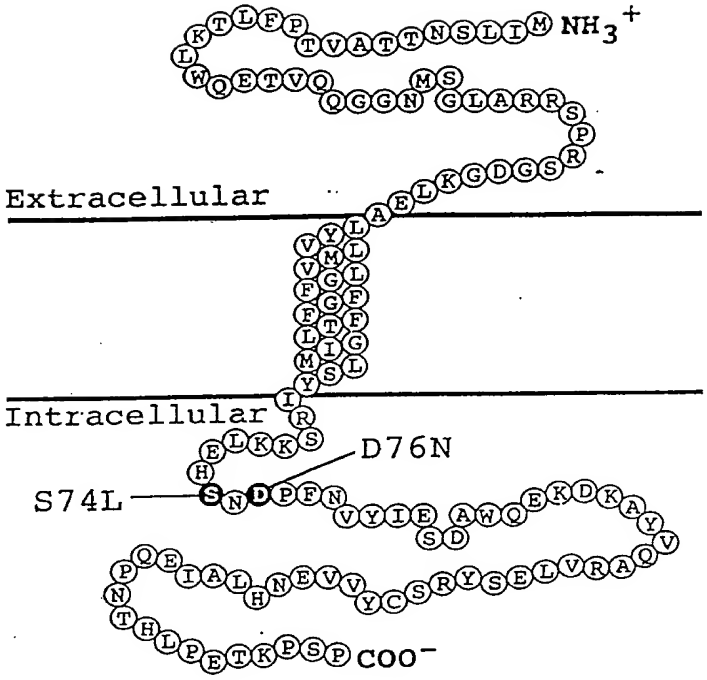


Figure 13C

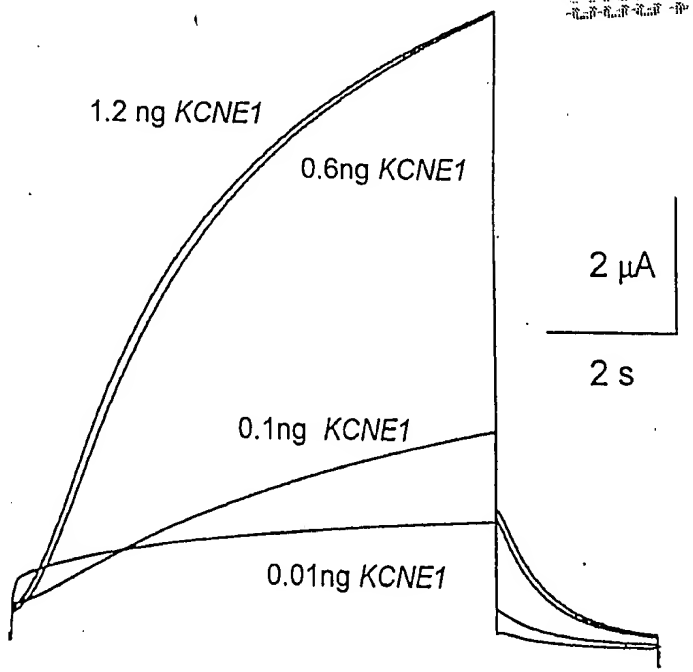


Figure 14A

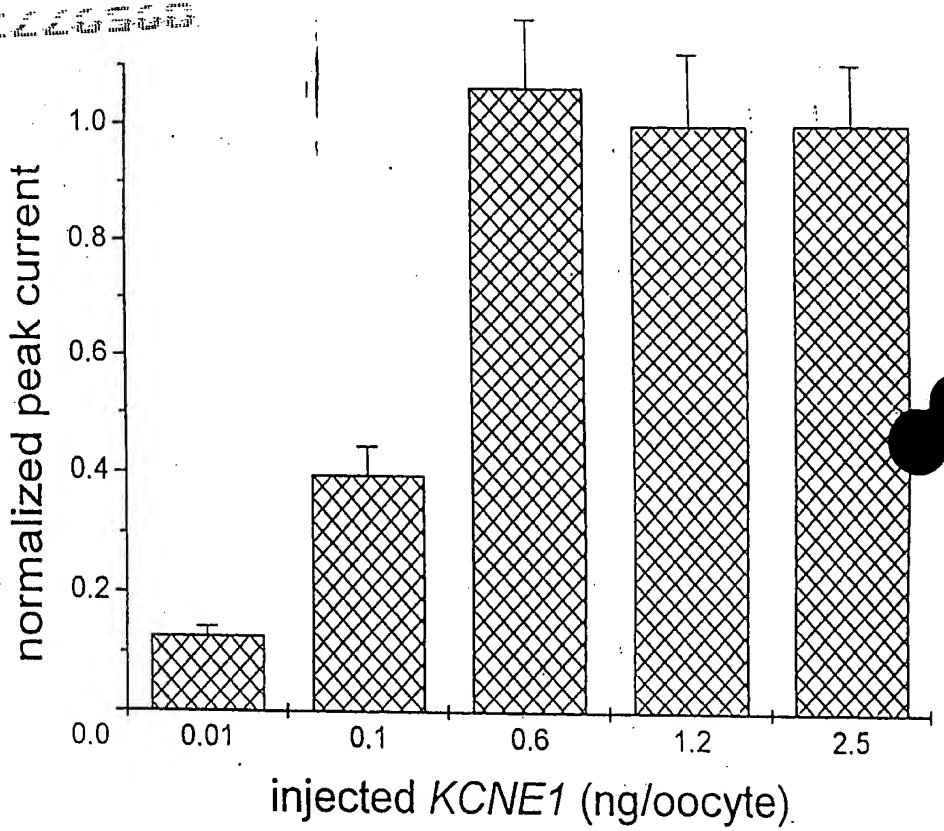


Figure 14B

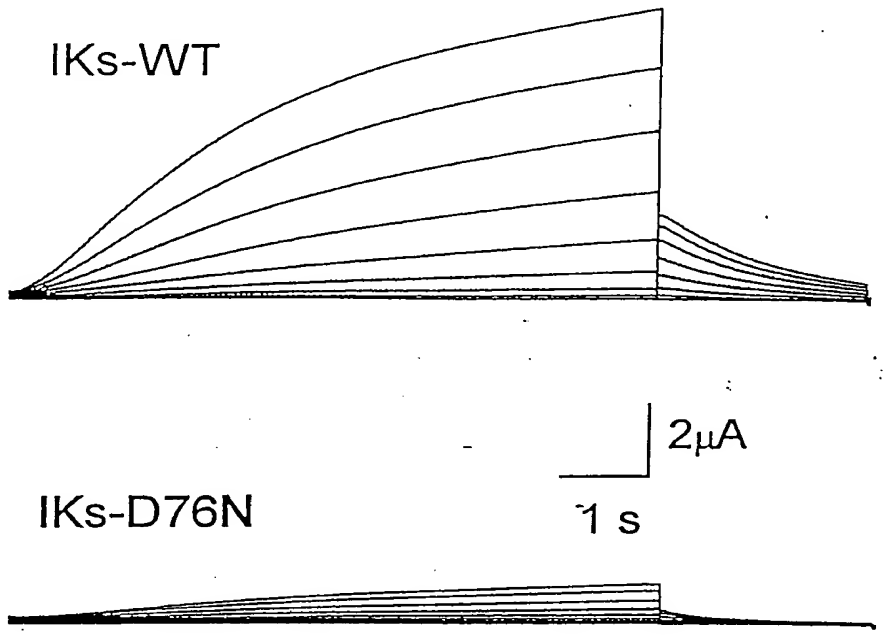


Figure 15A

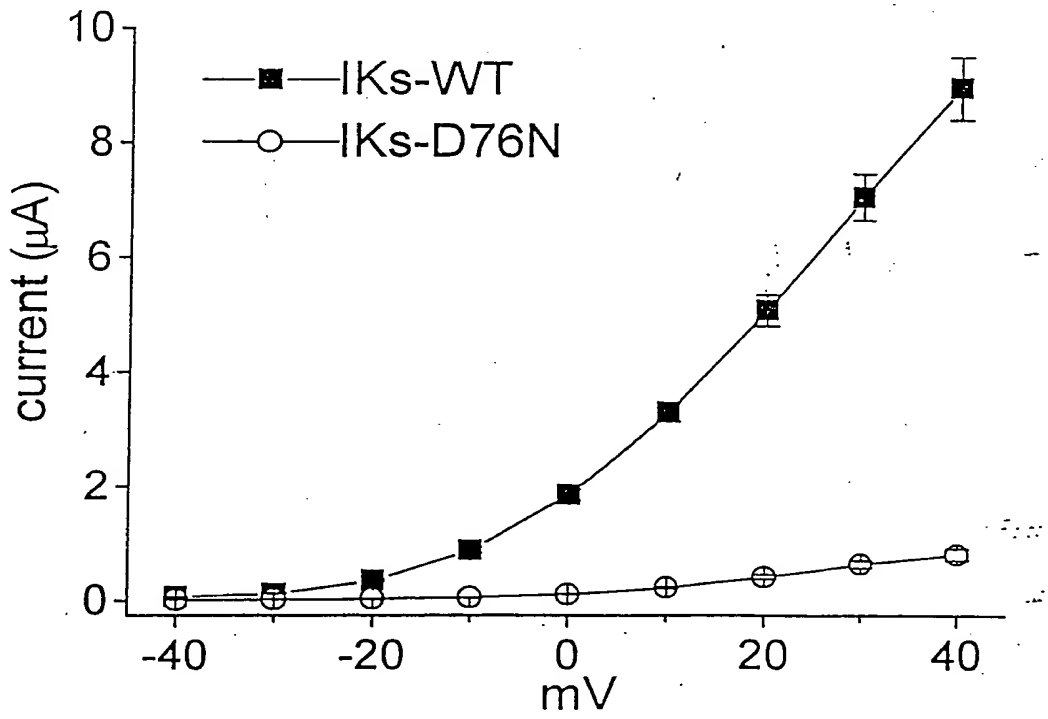


Figure 15B

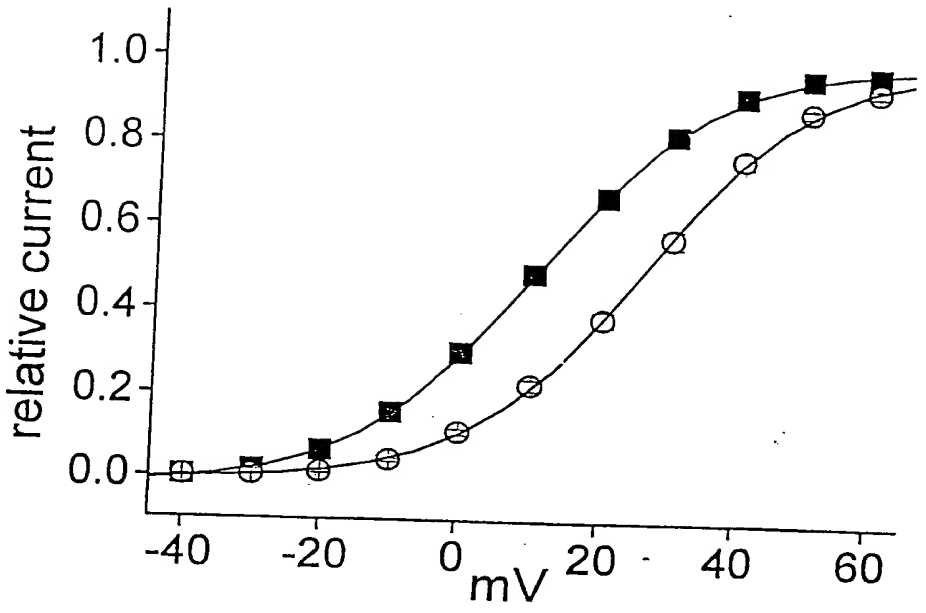


Figure 15C

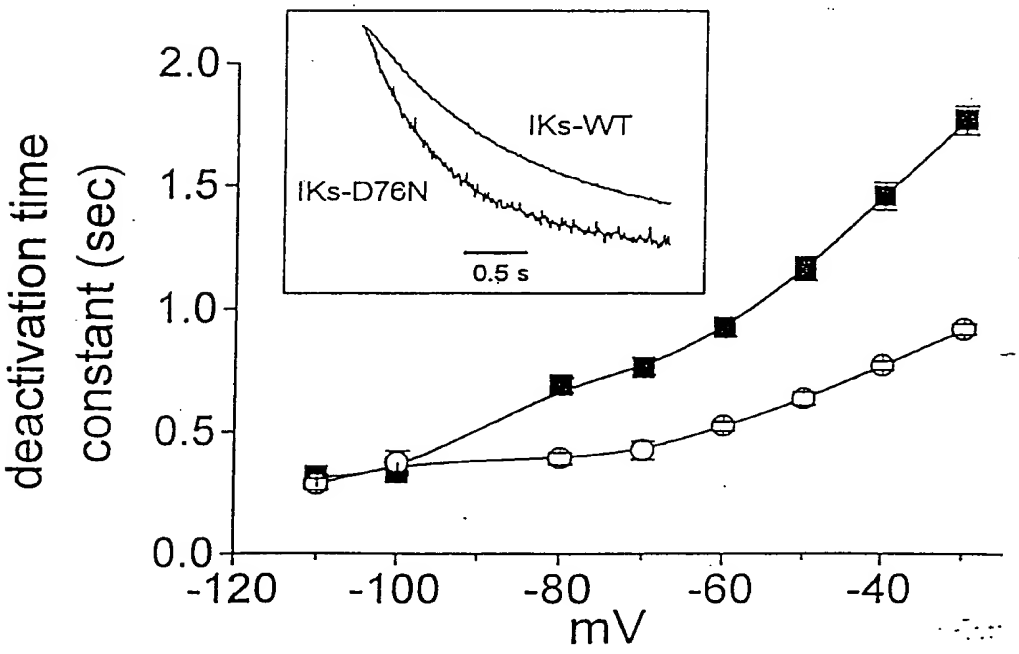


Figure 15D

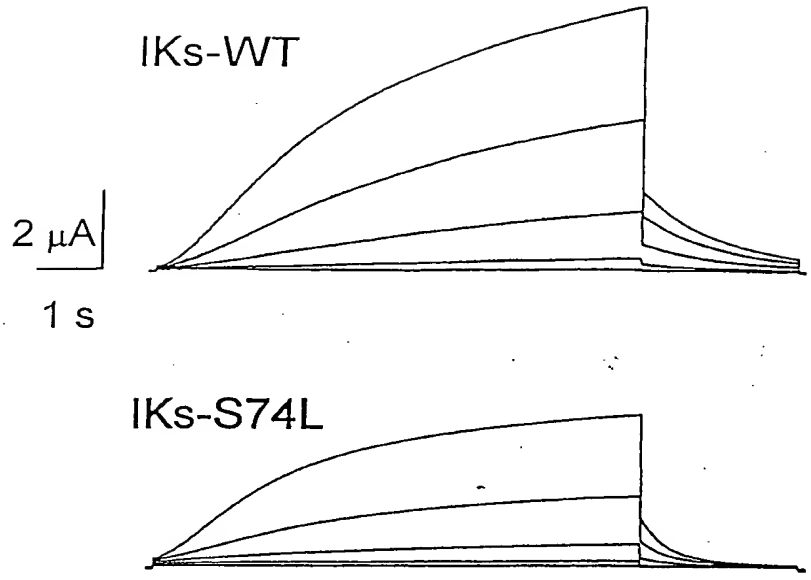


Figure 16A

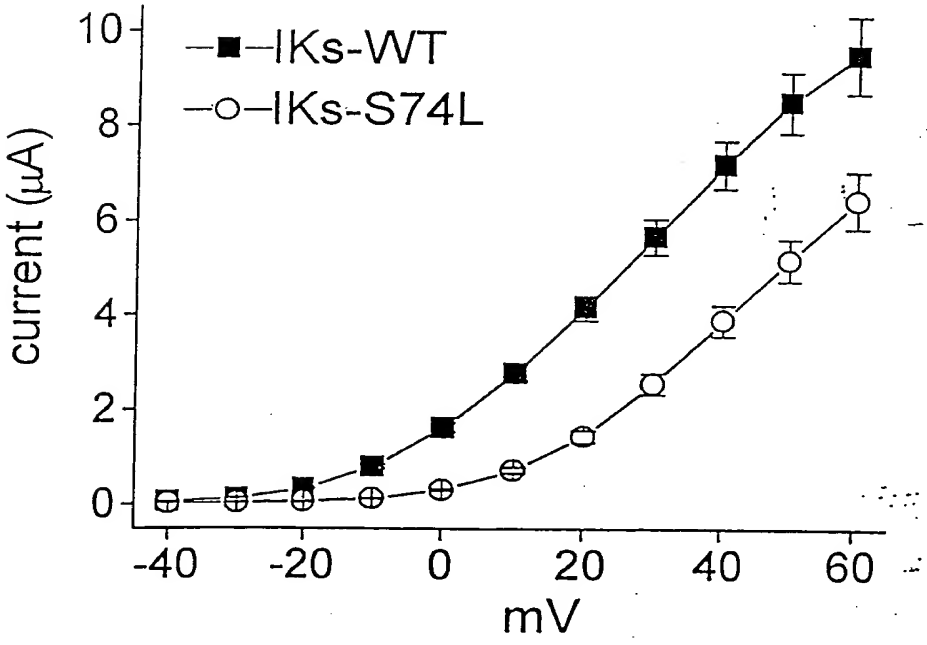


Figure 16B

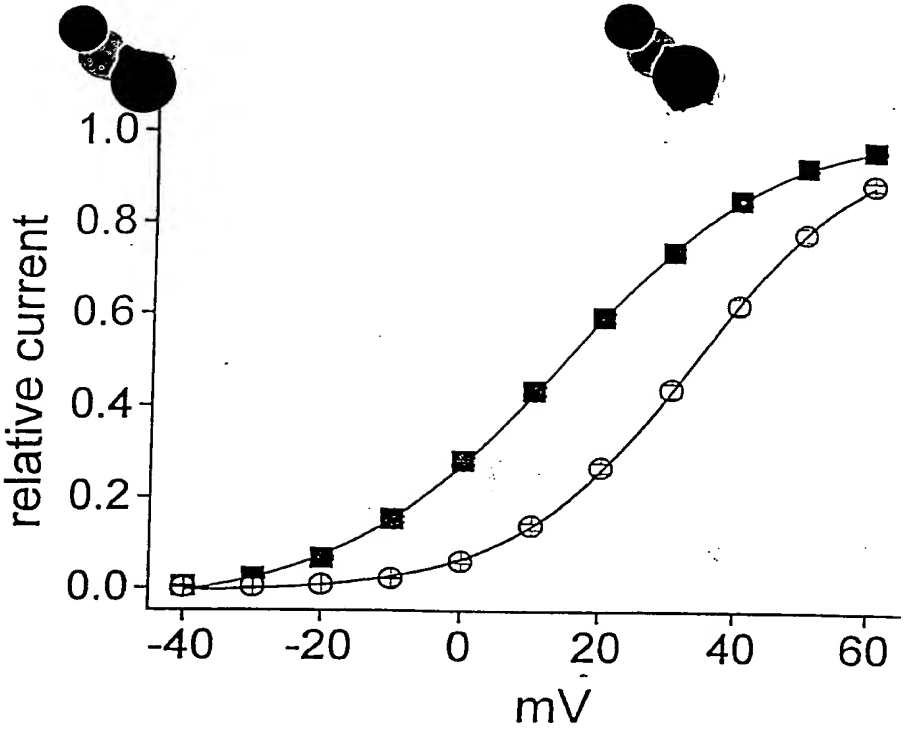


Figure 16C

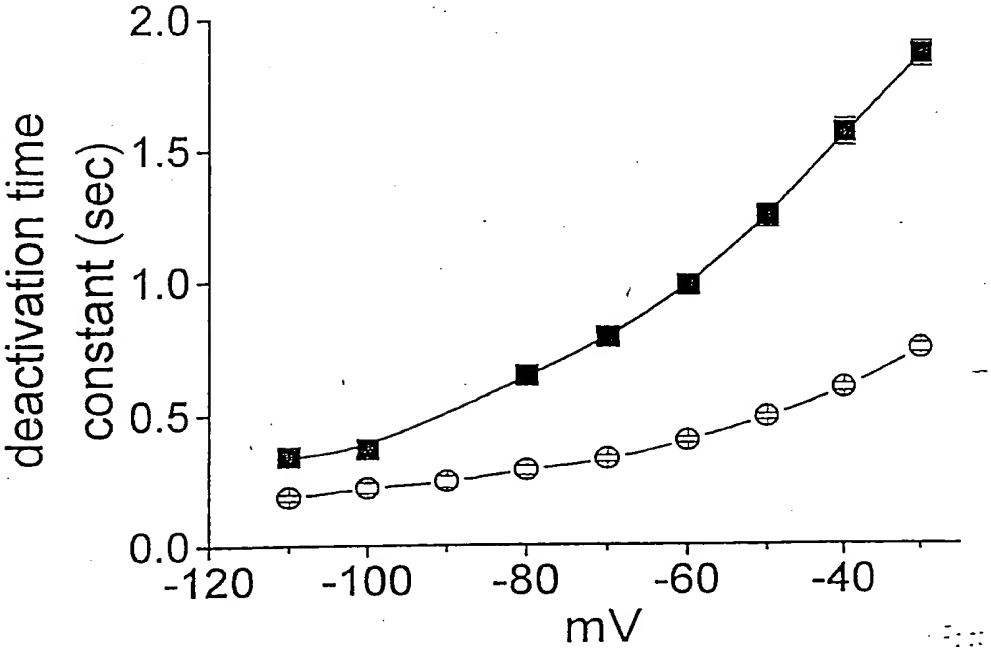
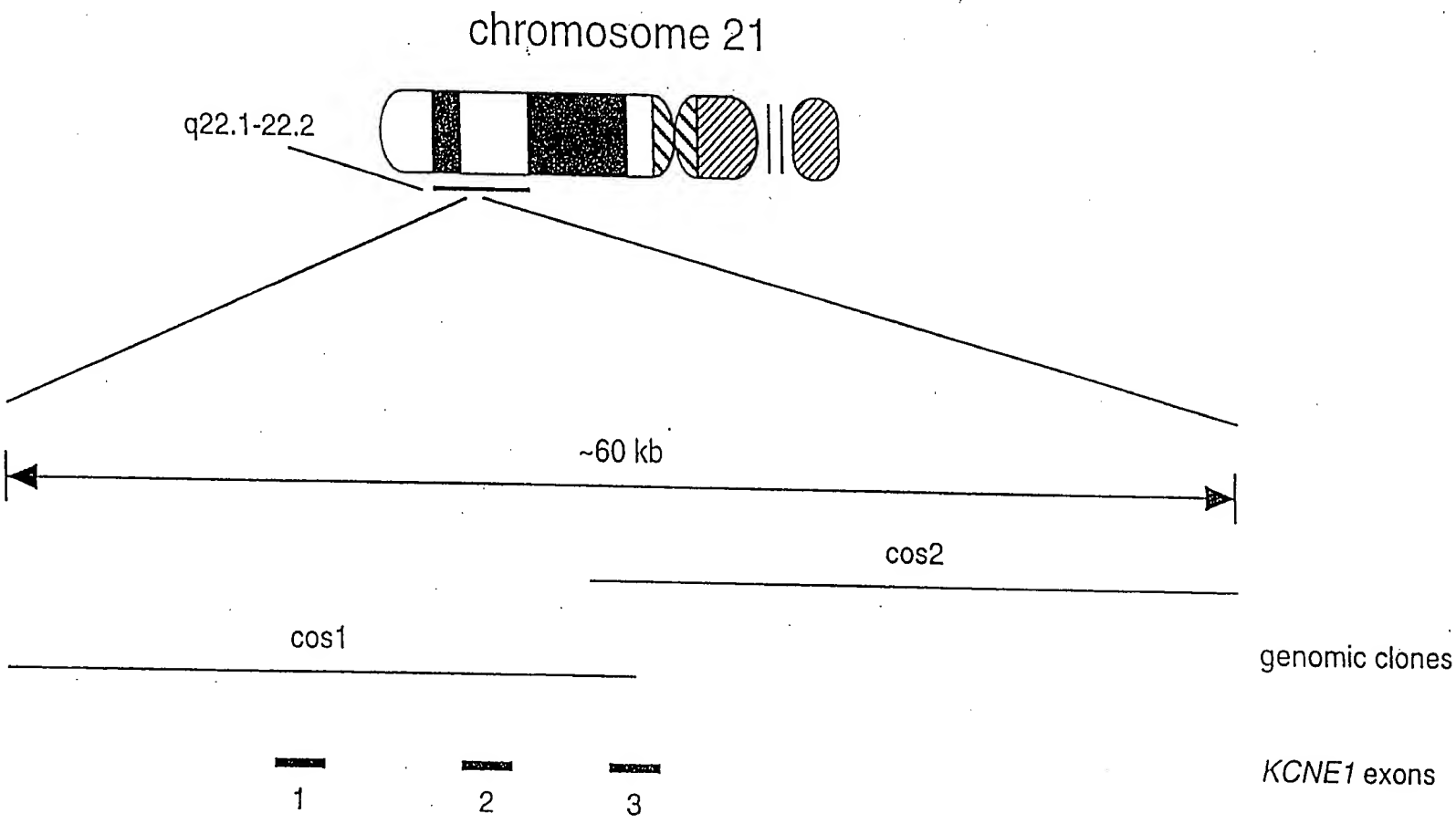


Figure 16D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cos2
cos1
genomic clones
1
2
3
KCNE1 exons

Figure 17

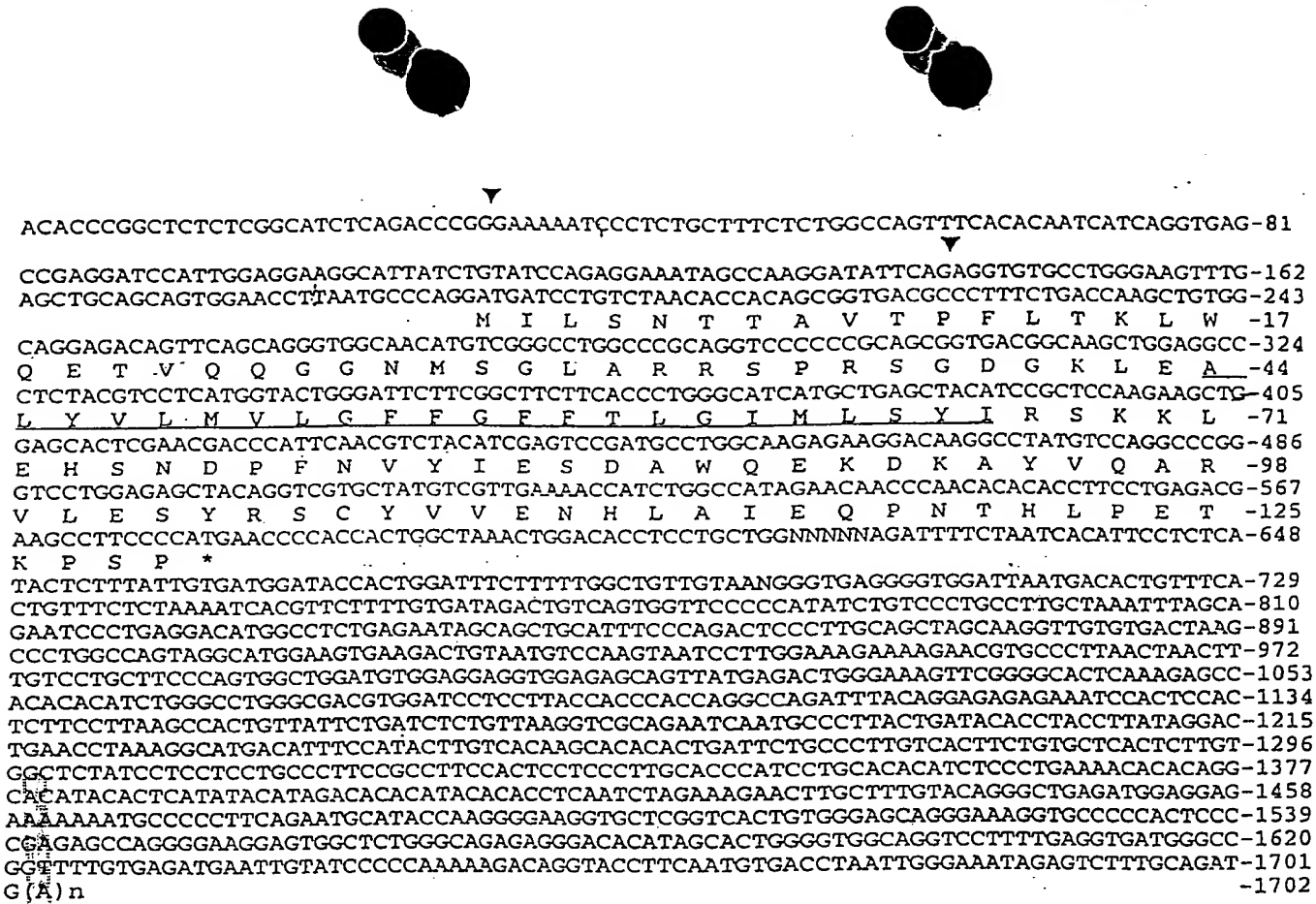
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Figure 18